

In the Claims

Please substitute the following amended claims for those currently pending:

1 - 20. (cancelled)

21. (Currently Amended) ~~The monitor support mechanism of claim 19,~~

A monitor support mechanism for supporting a monitor which is movable along a path of motion, the monitor support mechanism comprising:

²² a cam having a ²¹ cam surface;

²³ a cam follower for riding along the cam surface; and

²⁴ an energy storage member for providing a force against the cam follower in a direction which is non-parallel to the path, wherein the cam follower transfers said force to the cam surface in a direction which is non-parallel to the path;

wherein said cam surface converts said force into a first reaction force component which is parallel to the path and a second reaction force component which is perpendicular to the first reaction force, wherein as the energy storage member moves relative to the cam along the path, said energy storage member force varies, and wherein the first reaction force component provides a substantially constant supporting force on the monitor as the energy storage member force varies; and

wherein the energy storage member is positioned so that the force applied by the energy storage member is oriented in a direction non-parallel to the path.

22. (Currently Amended) A monitor support mechanism for supporting a monitor, the monitor support mechanism comprising:

a guide having a path of motion associated therewith;

a cam having a cam profile;

a cam follower adapted to ride on the cam;

a force member to apply a force to the cam follower which forces the cam follower against the cam, the force in a direction which is non-parallel to the path of motion, the cam applies a reaction force against the cam follower which converts the force member force into a first reaction force component in the direction of the path of motion and a second reaction force component; and

a truck coupled to the monitor, coupled with the at least one cam follower, movably coupled with the guide, and movable along the path of motion, the force member applies an increasing force on the cam follower as the truck moves along the path of motion;

wherein, the cam ~~surface~~ profile comprises a shape wherein the first reaction force component is a substantially constant supporting force on the monitor.

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23. (Currently Amended) The monitor support mechanism as recited in claim 22, further comprising an arm rotatably coupled to the truck and having a distal end coupled to the ~~at least one~~ cam follower.

24. (Original) The monitor support mechanism of claim 23, wherein the arm includes a plurality of attachment points along a length of the arm and wherein the force member is a spring coupled to the arm at one of the plurality of attachment points.

25. (Currently Amended) The monitor support mechanism as recited in claim 22, wherein the cam profile generally faces and does not intersect ~~the~~ an axis of motion of the truck.

26. (Original) The monitor support mechanism as recited in claim 22, wherein the path of motion is oriented in a vertical direction.

27. (Original) The monitor support mechanism as recited in claim 22, wherein said cam includes opposing inward facing cam surfaces having a decreasing width therebetween towards a lower end of the cam surfaces.

28. (Original) The monitor support mechanism as recited in claim 22, wherein said cam includes a pair of outward facing cam surfaces having an increasing width therebetween towards a lower end of the cam surfaces.

29. (Original) The monitor support mechanism of claim 22, wherein the truck, the cam follower, and the energy storage member all move in a generally planar arrangement with each other.

30. (Original) The monitor support mechanism of claim 22, further comprising a member for increasing a pre-load force on the force component.

31. (Currently Amended) The monitor support mechanism of claim 22, wherein a frictional force prevents the truck from moving until ~~it~~ the friction force is overcome by a pre-determined outside force applied to the truck.

32. (Currently Amended) A monitor support mechanism for supporting a monitor, the monitor support mechanism comprising:

a support having a guide associated therewith;

a cam having two opposing cam surfaces, the cam surfaces having a distance therebetween, where the distance varies from an upper portion to a lower portion of the cam and wherein the guide is between the two opposing cam surfaces;

two pivoting members each having a cam follower coupled thereto, the cam followers adapted to ride on the opposing cam surfaces, and the cam followers coupled with the pivoting members;

at least one spring coupled between the two pivoting members;

a truck coupled with the two pivoting members and coupled to the monitor, the truck movably coupled with the guide, where the cam follower rides along the cam surface as the truck travels along the guide.

33. (Original) The monitor support mechanism as recited in claim 32, wherein the at least one spring is disposed adjacent to a distal end of the pivoting members.

34 - 35.(cancelled)

36. (Currently Amended) A monitor support mechanism for supporting a monitor, the monitor support mechanism comprising:

a support having a guide associated therewith;

a cam having a cam surface, the cam having a curved shape around the guide;

at least one cam follower adapted to ride on the cam surface;

a coil spring to apply a force for forcing the cam follower against the cam surface, the cam surface converting the force into a first reaction force component in the direction of ~~the~~ an axis of motion and a second reaction force component; and

a truck operatively coupled with the at least one cam follower and coupled to the monitor, the truck movably coupled with the guide, where the cam follower rides along the cam surface as the truck travels along the guide.

37. (Original) The monitor support mechanism of claim 36, wherein the first reaction force is substantially constant as the truck translates up and down the guide.

38. (Original) The monitor support mechanism of claim 36, wherein each cam follower rides on the cam surface and rotates the cam to increase the spring force.

39. (Currently Amended) A monitor support mechanism comprising:

a support having a guide associated therewith;

a cam having a cam surface, the cam coupled to the support;

at least one cam follower adapted to ride on the cam surface;

a flat spring to apply a force for forcing the cam follower against the cam surface, the cam surface converting the force into a first reaction force component in ~~the~~ a direction of ~~the~~ an axis of motion and a second reaction force component; and

a truck operatively coupled with the at least one cam follower and coupled to the monitor, the truck movably coupled with the guide, where the cam follower rides along the cam surface as the truck travels along the guide.

40. (Original) The monitor support mechanism of claim 39, further comprising means for changing a pre-load force on the flat spring.

41. (cancelled)

42. (Currently Amended) ~~The monitor support mechanism of claim 41,~~

A monitor support mechanism for supporting a monitor, the monitor support mechanism comprising:

a first section having a cam follower guide;

a cam having a path of motion relative to the first section;

a cam follower movable within the cam follower guide;

an energy storage member to apply a force to the cam follower which forces the cam follower against the cam, the force in a direction which is non-parallel to the path of motion;

wherein ~~the monitor~~ is coupled to the cam and the energy storage member applies a varying force on the cam follower as the cam moves along the path of motion, the cam converting the varying force into a substantially constant supporting force on the monitor; and

wherein the cam follower guide is approximately perpendicular to the path of motion.

43. (Currently Amended) The monitor support mechanism of claim 41 ~~41~~ 42, wherein the cam follower guide is angled relative to the path of motion.

44. (Currently Amended) The monitor support mechanism of claim 43, wherein the cam follower guide ~~angle~~ is substantially normal to a surface of the cam.

45. (cancelled)

46. (Currently Amended) ~~The monitor support mechanism of claim 45;~~

A monitor support mechanism for supporting a monitor, the monitor support mechanism comprising:

_____ a non-metallic first section having a groove and a cam integral therewith;

_____ a non-metallic truck movable within the groove along a path of motion;

_____ a cam follower coupled to the truck; and

_____ an energy storage member to apply a force to the cam follower which forces the cam follower against the cam, the force in a direction which is non-parallel to the path of motion;

_____ wherein the monitor is coupled to the truck and the energy storage member applies a varying force on the cam follower as the truck moves along the path of motion, the cam converting the varying force into a substantially constant supporting force on the monitor; and

wherein the non-metallic first section comprises an injection molded plastic section.

47. (Currently Amended) The monitor support mechanism of claim 45 46, wherein the energy storage member comprises a fiberglass spring.

48 - 49.(cancelled)